REMARKS/ARGUMENTS

Claims 1-3, 5-10, 12, 15-16 and 18-23 remain in this application. Claims 5, 15, 21 and 22 are withdrawn from consideration. Claims 4, 11, 13-14 and 17 have been cancelled without prejudice.

The Examiner is thanked for the thorough examination of the present application. Applicants assert that the remaining claims are patentable for at least the reasons set forth herein.

Improper Final Action

Initially, it is noted that contrary to a statement in the Office Action Summary, the "Final Action" is actually Non-Final as agreed by the Examiner in a telephone conference between the Examiner and the undersigned on April 9, 2009, since the Action directly follows the filing of an RCE.

Response to the 35 U.S.C. § 103(a) rejections:

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Imamura* (U.S. Patent No. 6862262, hereinafter *Imamura)* in view of *Ito et al.* (U.S. Pub. No. 2003/0128660, hereafter *"Ito").* Applicants respectfully request that the rejection be withdrawn, as Applicants invented the claimed embodiments prior to the filing date of *Ito*.

The Examiner asserted that the affidavit filed on December 22, 2008 under 37 CFR 1.131 is ineffective to overcome the Ito reference. The Examiner asserted that because the entire period during which diligence is required has not been accounted for by either affirmative acts or acceptable excuses, reasonable diligence has not been evidenced by the Applicant.

DISCUSSION OF REASONABLE DILIGENCE ESTABLISHED BY THE APPLICANTS

First, the Applicants respectfully submit that the CAFC in In Re Mulder 716 F2d 1542 seems to have found that ***a filing date of a priority application can be relied upon as a constructive reduction to practice***, so diligence would be required from sometime before the reference filing date until the filing date of the priority application. The Applicants respectfully

submit that reasonable diligence before the reference filing date until the filing date of the priority application is established according to the filed affidavit.

However, in order for helping the Examiner in acknowledging the reasonable diligence established by the Applicants, the Applicants summarized the diligence by the Applicants as following.

a.) September 26, 2002----invention date, which is item (6) in the declaration;

b.) October 09, 2002-- YUSO entered this application (91A-035) into their Chinese docket system on October 09, 2002 (attached hereto as Attachment 2-A of the declaration). In other words, on or before October 09, 2002, the Assignee forwarded the patent disclosure (91A-035) of this patent application to YUSO.

c.) a meeting held by the Applicants with a Taiwan (TW) law firm (YUSO) between September 26, 2002 and December 11, 2002, which is discussed in item (9) in the declaration. Although Applicants are without documentation of that meeting, for reasons discussed below, the Applicants are certain that the patent disclosure (91A-035) of the priority application was discussed on or before December 11, 2002.

d.) December 11, 2002-- the Applicants participated in a meeting for entrusting YUSO with the preparation of another patent disclosure (91A-045) for filing in Taiwan (initially) and the United States (attached hereto at Attachment 3-A (on page 2) of the declaration). In general practice, the Applicants respectfully submit that in their company (i.e. the Assignee REALTEK Semiconductor Corp.) a patent disclosure having an earlier reference number always is discussed earlier, that is, in the numerical order of the reference numbers. The Applicants respectfully submit that this patent disclosure (91A-035) was discussed before the later patent disclosure 91A-045; and this patent disclosure (91A-035) was discussed at least on or before Dec. 11, 2002 (which is prior to the Ito reference filing date December 31, 2002).

e.) January 16, 2003---the Applicants made efforts to divide and incorporate some of the contents of the application (91A-035) into other patent disclosures (91A-045 and 91A-031) of the same inventive entity, which is item (10) in the declaration. The efforts at division and incorporation resulted from discussions between the Applicants and YUSO on these patent disclosures (91A-035, 91A-045 & 91A-031). In other words, even after the discussion of the patent disclosures (91A-045) on December 11, 2002, the Applicants made further efforts to prepare a Taiwan patent application based on this patent disclosure (91A-035), at least on

thinking and discussion how to express and claim these patent disclosures (91A-035, 91A-045 & 91A-031). The reasonable diligence involves the efforts on division and incorporation because the applicants want to have better discussion with YUSO to decide how to these patent disclosures (91A-035, 91A-045 & 91A-031). From December 11, 2002 (the discussion date of 91A-045 with YUSO) to January 16, 2003, the Applicants still had some efforts on this patent application, i.e. they thought how to divide and incorporate.

f.) March 4, 2003---YUSO provided first TW drafting specification to the applicants, which is item (16) in the declaration;

g.) March 13, 2003--- YUSO provided second TW drafting specification to the applicants, which is item (17) in the declaration;

h.) March 20, 2003--- YUSO provided third TW drafting specification, which is item (18) in the declaration; and

i.) March 21, 2003---the priority application is filed in TW Patent Office, which is item (19) in the declaration.

Based on the above items a.) ~~ i.), the reasonable diligence before the reference filing date until the filing date of the priority application is acknowledged and well established.

Also, the Applicants respectfully submit that the time period between conception and application preparation to be quite reasonable, because the patent assignee is a major corporation in which patent application decision-making may be a complex process.

In this regard, Applicants submit herewith a declaration (pursuant to 37 CFR 1.131) setting out the salient facts to establish this prior invention date. Therefore, the Examiner has failed to establish a case of prima facie obviousness, because *Ito* is disqualified as a reference.

With respect to the attachments to the accompanying declaration, many of the documents are in Chinese. If necessary, the Applicants will provide translations of the attachments. However, 37 CFR 1.131 does not state that all supporting attachments must be in English, nor does it state that the supporting attachments must independently verify the statements set forth in the declaration. 37 CFR merely requires that a declaration under 37 CFR 1.131 be accompanied by Exhibits that support the statements made in the declaration. In this regard, the Applicants are all fluent in Chinese and understand the contents of the Chinese language attachments, and those attachments have been referenced to properly support the statements that are set out in the declaration. The Examiner asserted that translations of any such "email transmittals" should be

made into English. For this, English translations of any such "email transmittals" are made and attached.

In short, Applicants submit that the accompanying declaration under 37 CFR 1.131 is sufficient to have *Ito* withdrawn from consideration, and therefore the outstanding rejections withdrawn.

Still further, Applicants have carefully studied the Examiner's opinion, the cited references *Imamura*, and found that *Imamura* fails to teach or suggest the claim 1. Claim 1 (shown in a clear version) recites:

> An apparatus for sampling timing compensation at a receiver of a communication system, wherein each of a first and a second symbol signals comprises two pilot signals transmitted via a first and a second pilot subchannels respectively, and the first and the second pilot subchannels comprise a first and a second pilot indexes respectively, the apparatus comprising:
>
> a pilot subchannel estimator for generating a first frequency responses of two of the pilot signals transmitted over the first pilot subchannel and generating second frequency responses of the other two of the pilot signals transmitted over the second pilot subchannel;
>
> a timing offset estimator, coupled to the pilot subchannel estimator, for **calculating a timing offset according to** a first difference between the first frequency responses of the first and second symbol signals, a second difference between the second frequency responses of the first and second symbol signals and **a substraction between the first and second differences**; and
>
> a phase rotator, coupled to the timing offset estimator, for performing sampling timing compensation according to a phase rotation corresponding to the timing offset.
>
> (*Emphasis added*)

It is clearly shown that the claimed invention utilizes not only the first and the second differences calculated according to the first and the second frequency responses respectively, but also **the subtraction between the first and the second differences** to obtain the timing offset. *Imamura*, however, at most teaches a phase error calculation circuit 204 for calculating a residual phase error with high estimation accuracy using the residual phase error of each subcarrier calculated by differential detection (*Imamura: Col. 5, lines 59-63*), but is silent on "calculating a timing offset according to **a subtraction between a first and a second differences** which are calculated according to first and second frequency responses respectively". Although *Imamura* discloses dividers 305 and 306 and normalization circuits 704, 707 and 1204, each of these circuits just normalizes **ONE added output** to set its amplitude to 1 (*Imamura: Col. 6, lines 18-*

21; Col. 8, lines 6-8; Col. 8, lines 16-18; Col. 11, lines 64-66) but teaches nothing about calculating a timing offset according to **a subtraction between a first and a second difference**. As discussed above, *Ito* fails to qualify as a reference in rejection of Claim 1 and consequently fails to compensate for the deficiency of *Imamura*. Therefore, the claim 1 is respectfully submitted to be patentable over *the prior art*. Since claims 2-3 are dependent upon claim 1, if claim 1 is found to be allowable, so should the dependent claims.

Claims 6, 10-12, 16, 18, 19, 20 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Imamura* in view of *Ito* and *Singh et al.* (U.S. Patent No. 7139320, hereafter *"Singh"*). This rejection is respectfully traversed.

As explained above, *Imamura* in view of *Ito* at least fail to disclose "calculating a timing offset according to **a subtraction between a first and a second differences**" as claimed in independent claims 1, 10, 18 and 23. *Singh* does not compensate for the deficiencies of *Imamura* and *Ito*. Therefore, claims 1, 10, 18 and 23 are patentable over *Imamura* in view of *Ito* and *Singh*. Since claims 6, 11-12, 16, 19 and 20 dependent upon claims 1, 10, 18 and 23 respectively, if claims 1, 10, 18 and 23 are found to be allowable, so should the dependent claims.

Claims 7, 8 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Imamura* in view of *Ito*, *Singh* and *National* ("Application of the ADC1210 CMOS A/D Converter"; National Semiconductor Application Note 245, April 1986). Since claims 7, 8 and 17 are dependent upon claims 1 and 10 respectively and *National* nowhere teaches or suggest "calculating a timing offset according to **a subtraction between a first and a second differences**", applicants therefore respectfully assert that claims 7, 8 and 10 are patentable because of at least the same reasons placing claims 1 and 10 allowable.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Imamura* in view of *Ito*, *Singh* and *Matheus et al.* (US Pat. No. 7009932, hereinafter "*Matheus*"). Since claim 9 is dependent upon claim 1 and *Matheus* nowhere teaches or suggests "calculating a timing offset according to **a subtraction between a first and a second difference**", applicants therefore respectfully assert that claim 9 is patentable because of at least the same reasons placing claim 1 allowable.

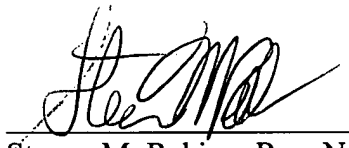
Conclusion:

In view of the above remarks/arguments and amendments set forth above, applicants respectfully request allowance of claims 1-3, 6-10, 12, 16, 18-20 and 23. If the Examiner believes that a telephone interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Should the remittance be accidentally missing or insufficient, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

No fee is believed due. Should any fee be required, however, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,



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Date

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